

REMARKS

Claims 1-3, 5-9 and 12-14 are pending in this application. By this Amendment, claim 1 is amended. The amendments introduce no new matter. Claim 11 is canceled without prejudice to, or disclaimer of, the subject matter recited in that claim. Reconsideration of the application based on the above amendments and the following remarks is respectfully requested.

The Office Action, in paragraph 2, rejects claim 11 under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the written description requirement. The cancellation of claim 11 renders this rejection moot.

The Office Action, in paragraph 4, rejects claims 1-3, 5-9 and 12-14 under 35 U.S.C. §103(a) as being unpatentable over JP-A-2000-071722 to Ogawa (the English-language equivalent to which reference will be made in this response is U.S. Patent No. 6,929,045) and further in view of U.S. Patent Application Publication No. 2005/0230021 to Cottrell and U.S. Patent No. 6,079,467 to Ueyoko. This rejection is respectfully traversed.

Independent claim 1 recites, among other features, wherein the bead includes a pair of split bead cores, the split bead cores being disposed on both sides of the carcass to sandwich the carcass, and wherein an inner end in the tire's radial direction of the split bead cores outside as viewed from the tire's width direction is so placed that a vertical distance from a tire bead base or its extension is not more than 3 mm. The combination of applied references cannot reasonably be considered to have suggested these features.

At the outset, it should be noted that the Office Action's reliance on Ogawa and Ueyoko in rejecting the pending claims is unreasonable. The pending claims recite a runflat tire. In contrast, Ogawa is not directed to a runflat. In this regard, the means for achieving any object to which the pending claims pertain cannot be derived from Ogawa. Likewise, the tire disclosed in Ueyoko is not a runflat tire. The tire is not intended to operate under the

runflat condition. Furthermore, the tire of Ueyoko has a bead structure in which the carcass ply is turned around the bead core. Such a construction is completely different structurally from the bead structure of the pending claims. In this regard, one of ordinary skill in the art would not have relied on Ueyoko to derive the claimed tire with any degree of predictability or any reasonable explanation of success. Additionally, it should be noted that the claimed tire aims to increase the durability and the bead-securing force even when the internal pressure is 0 kPa. This construction prevents the bead from disengaging from the rim during running in the runflat state. Therefore, the claimed tire provides advantages not realized by the prior art. For at least these reasons, one of ordinary skill in the art would not have relied on Ogawa and Ueyoko to derive the claimed tire. Thus, the Office Action's reliance on these references is unreasonable.

In response to Applicant previously having made the above argument, the Office Action broadly asserts in the Response to Arguments section, at paragraph 5, that one of ordinary skill "would have found it obvious to include a runflat insert in a tire of Ogawa in view of Cottrell for the benefits of improved running during an under inflated condition. It is emphasized that Cottrell is similarly directed to a non-conventional carcass structure (one formed of individual cords, as opposed to calendered plies) and thus the teachings of Cottrell are directly analogous to the tire construction of Ogawa." Despite the assertions made in the Office Action, the above attempt at rebuttal of Applicant's previous arguments fails for at least the following reasons.

The mere conclusory statement fails to meet the appropriate standard set forth in *In re Kahn* (citations omitted), which was favorably endorsed by the U.S. Supreme Court in *KSR*, stating that obviousness rejections cannot be based on mere conclusory statements.

Throughout the examination of this application to date, it has not been adequately shown why one of ordinary skill in the art would have predictably combined the cited references in the

manner suggested with any reasonable expectation of success in order to address the objectives addressed by the subject matter of the pending claims. This Office Action fails to remedy that difficulty. It is not enough for the Office Action to broadly assert that such a combination would have been predictably made without being able to support that conclusion with any more than broad assertions which fail to provide any objective evidence of record.

Furthermore, the combination of applied references cannot reasonably be considered to have suggested the above-recited features. The Office Action relies on Ueyoko for suggesting the claimed vertical distance range recited in claim 1. For example, the Office Action asserts that Ueyoko teaches that the distance between the innermost carcass structure and the bead seat is between 1 and 6 times the carcass cord diameter, and that this falls within the broad range of the claimed invention for a majority of tire constructions, as tires with a carcass cord larger than 0.85 mm are rare. The Office Action further asserts that Ueyoko specifically states that the distance is below 6 times the carcass cord diameter in order to maintain the engaging force between the bead and the rim. As such, the Office Action asserts that one of ordinary skill in the art at the time of the invention would have found it obvious to form the tire of Ogawa with a spacing not more than 5 mm, more preferably not more than 3 mm. The Office Action also asserts that the Applicant has not provided a conclusive showing of unexpected results to establish a criticality for the claimed spacing. Applicant respectfully disagrees with these assertions.

The Office Action's assertion that the dimension T4, as disclosed in col. 5, lines 40-50 of Ueyoko, allegedly corresponds to the claimed vertical distance is unreasonable. In contrast to claim 1, the distance T4 in Ueyoko is not a vertical distance from the tire bead base or its extension. Rather, the dimension T4 is the shortest distance (minimum rubber thickness) from the bead bottom face 4s to the carcass cord. Thus, Ueyoko fails to teach the claimed vertical distance. In response to Applicant previously having made this specific argument, the

Office Action apparently has intended to indicate that "[i]t is agreed that the distance in Ueyoko is "not" vertical. Otherwise, the conclusion in the Office Action does not appear to make sense. The Office Action, however, goes on to state that "the vertical distance and the distance in Ueyoko would be expected to [be] extremely close to one another, particularly since the respective values are relatively small." In this regard, the Office Action reads out of Applicant's claims the positively recited claim term "vertical" distance. This is a specific example of where the Office Action takes an improperly strained approach in trying to force the asserted combinations of references to render obvious the subject matter of the pending claims.

The assertion that Applicant has not shown the criticality of the claimed range is without merit. Attention is again directed to Table 1 of the present application, particularly Examples 2 and 4. The durability and bead-securing force were tested in both of these examples. A comparison of these examples shows that the pitch P , the number of carcasses n , the value $L (P/n)$, the type of bead and the overlap portion are all the same. The Table also shows that in Example 2, the distance between the bead inner end and the bead base is 5 mm and in Example 4, the distance is 3 mm. Finally, Table 1 shows that the durability and the bead-securing force are significantly better in terms of performance than the tire in Example 2. For example, the table shows that the durability for the tire in Example 4 is 112 and the bead-securing force is 108; whereas the durability for the tire in Example 2 is 110 and the bead-securing force is 106. Clearly, a comparison between Example 4 and Example 2 shows the criticality of the claimed vertical distance.

Applicant has previously made the above arguments. In reply, the Response to Arguments section of the current Office Action renders a the broad conclusion that the reference "generally recognizes the benefits of having a small separation between the bottom of the bead core and the tire bead base." The Office Action goes on to assert that it is the

Examiner's position that such a relationship would be highly desirable in a tire construction with or without a runflat insert. It is based on the Examiner's position in this regard, again not supported by any objective evidence of record, that one of ordinary skill in the art would have found it obvious to combine Ueyoko with Ogawa in order to get something close to the claimed range. The Office Action dismisses Applicant's showing of an advantage by asserting that the advantage would flow naturally from following the suggestion of the prior art. The difficulty is that this conclusion is based on supposition and generally concluding that the relationship would be highly desirable. This is certainly not the appropriate standard.

Further, the MPEP at §2131, in discussing anticipation of ranges, notes that when the prior art teaches a range within, overlapping, or touching the claimed range, but provides no specific examples falling within the claimed range the apparently anticipating range must be "disclosed in the [applied] reference with 'sufficient specificity to constitute an anticipation under the statute (emphasis added).'" This MPEP section goes on to discuss what constitutes "sufficient specificity." The question of "sufficient specificity" is likened to that of the species-genus relationship, *i.e.*, the species will anticipate the claims to a genus, but a genus does not always anticipate a claim to a species within the genus. When the claims recite a narrow range, particularly when some benefit is attributable to the narrow range, and the reference teaches a broad range, it is reasonable to conclude that the narrow range is not disclosed with sufficient specificity in the reference to constitute anticipation of the claims. Such is the situation with the Ueyoko reference. Its broad assertion of some arguably inclusive range does not disclose the specifically recited range with sufficient specificity to render it anticipating as to that feature.

In response, the Office Action continues to assert, in the Response to Arguments section, with reference to the results shown in Table 1, that Applicant has not provided a

conclusive showing of unexpected results to establish a criticality for the claimed spacing. The Office Action asserts that, in particular, the examples in Table 1, realize an increase in durability and bead securing force but this evidence does not provide, in the Examiner's opinion, "a conclusive showing of unexpected results." The Office Action asserts that "[t]he examples do not demonstrate a significant improvement in either property." "Significant improvement" is not the relative standard. It is, rather, unexpected results. Further, it has not been adequately shown that an approximately 2% increase is not "significant." Again here, the Office Action fails to provide any evidence to support the conclusions that are set forth.

As discussed previously, Table 1 provides a comparison between a distance of 5 mm and a distance of 3 mm. Table 1 also shows that in Examples 2 and 4 the majority of the various parameters are the same. In this regard, Applicant submits that Examples 2 and 4 show the criticality of the claimed vertical distance. Applicant also notes that MPEP §2145 provides that consideration of rebuttal evidence and arguments requires Office personnel to give weight to the proffered evidence and arguments. Office personnel should avoid giving evidence no weight, except in rare circumstances. MPEP §2145 further states that to be entitled to substantial weight, the Applicant should establish a nexus between the rebuttal evidence and the claimed invention, i.e., objective evidence of non-obviousness must be attributable to the claimed invention. Applicant submits that for the reasons discussed above, this burden has been met and thus the Examiner should avoid giving no weight to the evidence shown in Table 1.

Finally, the subject matter of claim 1 defines the specific distance noted to effectively prevent the deformation at the lower part of the bead portion, this deformation being an inherent problem in a runflat tire that may or may not have been recognized by the non-runflat tires to which the Office Action points as being applicable. Additionally, the split bead cores recited in the subject matter of the pending claims can effectively prevent the carcass ply from

pulling out of the bead portions. It is a synergistic action of this specific configuration, as positively recited in, for example, independent claim 1 that allows the bead structure that is the subject matter of the pending claims to exert a surprisingly high anchoring effect capable of standing up under the most severe runflat conditions. The tires disclosed in Ogawa and Ueyoko are not for maintaining such a configuration in an under inflated condition. As such, one of ordinary skill in the art would not easily adopt Ogawa and Ueyoko to a runflat tire in a first instance. Further, one of ordinary skill in the art would not then, having adopted those references in any manner, adjust the distance between the radially innermost end of the bead and the tire bead base in a manner that would render obvious the subject matter of the pending claims. The Office Action cannot continue to fill in the interstices in its obviousness analysis with mere conclusory statements, observations and/or suppositions that are not adequately supported by some objective evidence of record.

For at least the above reasons, the combination of applied references cannot reasonably be considered to have suggested the combination of all of the features positively recited in independent claim 1. Further, claims 2-6, 9, 10 and 12-14 also would not have been suggested by the combination of applied references for at least the respective dependence of these claims directly or indirectly on claim 1, as well as for the additional features each of these claims recites.

The combination of applied references would not have suggested the combination of all of the features positively recited in each of claims 7 and 8 either.

First, as noted above, the reliance on Ogawa and Ueyoko in rejecting claims 7 and 8 is unreasonable, as these references are directed to non-runflat tires. Second, claims 7 and 8 recite as viewed in a section in the tire's width direction under a condition where the tire is assembled to a standard rim to form a tire/wheel assembly and then a maximum load is applied to the tire with no inner pressure applied thereto, the folded end of the turn-up layer is

laid, in the tire's radial direction, outside of a line segment QB which connects an outermost point Q of a rim guard in the tire's width direction and an intersection B of the inner surface of the tire and a line extending outwardly in the tire's radial direction from the outermost point Q at an angle of 60 degrees in relation to a line parallel to the rim radial line. Neither Ogawa, Cottrell, or Ueyoko, individually or in combination, would have suggested this feature. Figs. 4 and 5 of Ogawa merely show the turn-up layer position perpendicular to the base. The drawings and disclosure of Ogawa fail to teach the angle of the turn-up layer in relation to a line parallel to the rim radial line.

In response to Applicant previously having made the above arguments, the Office Action, at the bottom of page 7 and the top of page 8 states, again in mere conclusory manner, while "it is agreed that Ogawa fails to teach the angle of the turn-up layer in relation to a line parallel to the rim radial line, Ogawa generally teaches embodiments in which the carcass turn-up is low or high. It appears that a high turn-up arrangement satisfies the claimed invention (emphasis added)." It is incongruous to base an obviousness rejection on some conclusion of an appearance that an arrangement satisfies the claimed invention when "it is agreed that [the reference] fails to teach" the particularly relied upon feature.

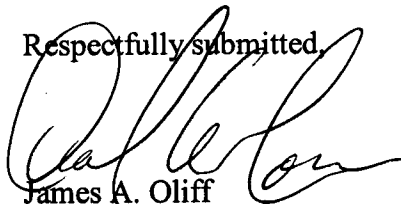
For at least these reasons, the combination of the applied references cannot reasonably be considered to have suggested the combinations of all of the features positively recited in independent claims 7 and 8.

Accordingly, reconsideration and withdrawal of the rejection of claims 1-3, 5-9 and 12-14 under 35 U.S.C. §103(a) as being unpatentable over Ogawa, Cottrell and Ueyoko are respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-3, 5-9 and 12-14 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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